

## ALBUMIN IN A FLEXIBLE POLYMERIC CONTAINER

## DESCRIPTION

## CROSS-REFERENCE TO RELATED APPLICATIONS

10-12-04  
This Application is a divisional of co-pending U.S. Application No. 10/101,490 filed  
March 19, 2002, <sup>now Patent No. 6,718,735,</sup> which Application is incorporated herein by reference and made a part hereof,  
and upon which a claim of priority is based.

## FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not Applicable.

## TECHNICAL FIELD

The present invention relates generally to the packaging of a protein, and more specifically to a flexible polymeric container for packaging of albumin.

## BACKGROUND OF THE INVENTION

Many peptides and proteins for pharmaceutical or other use are known, including glycoproteins, lipoproteins, immunoglobulins, monoclonal antibodies, enzymes, blood proteins, receptor proteins, and hormones.

One type of such compound is albumin. Albumin is a sulfur-containing, water-soluble protein that congeals when heated, and occurs in blood. Albumin is often utilized as a blood expander to assist in maintaining a patient's blood pressure, or sometimes to assist with increasing a patient's blood pressure during blood loss.

Proteins, such as albumin, are adsorbed by most man-made materials, including liquid containers made of various polymers. Adsorption of the protein onto the artificial polymeric surface results in a lowering of the protein content of that solution. Some protein solutions can be adversely affected by protein adsorption onto artificial surfaces through a process called denaturing. Denaturing is a process whereby the protein is not permanently adsorbed onto the polymeric container, but rather the protein molecules are adsorbed onto the container and then released. The adsorption and release can change the shape of the molecule (i.e., denature it). Often, when protein molecules in drug solutions have undergone denaturing,